

What is claimed is:

1. A method for modifying the level of a speech signal, wherein the speech signal is encoded as a bit stream, the method comprising:
changing a gain parameter in the encoded speech signal in a variable and
5 cyclical manner so that changes in gain are temporally dispersed.
2. The method according to claim 1, wherein the gain parameter is a fixed codebook gain index.
- 10 3. The method according to claim 2, wherein changing the gain parameter comprises incrementing the fixed codebook gain index in a variable and cyclical manner so that the increment in fixed codebook gain is temporally dispersed.
- 15 4. The method according to claim 3, the method further comprising:
maintaining the fixed codebook gain index at a first index increment value for a first portion of a cycle period; and
incrementing the fixed codebook gain index to a second index increment value for the remaining portion in that cycle period.
- 20 5. The method according to claim 4, wherein a first cycle period is defined by a pattern of index increment values, the method further comprising the step of repeating the pattern in one or more subsequent cycle periods.
- 25 6. The method according to claim 4, wherein a first cycle period is defined by a pattern of index increment values, the method further comprising the step of changing the pattern in one or more subsequent cycle periods.
- 30 7. A method for modifying the level of a speech signal, wherein the speech signal is encoded as a bit stream such that the speech signal is transported in one or more frames, each frame including a plurality of sub-frames, the method comprising:

changing a gain parameter in the encoded speech signal in a variable and cyclical manner over a plurality of sub-frames so that changes in gain are temporally dispersed over one or more sub-frames.

5 **8.** The method according to claim **7**, wherein the gain parameter is a fixed codebook gain index.

9. The method according to claim **8**, wherein changing the gain parameter comprises incrementing the fixed codebook gain index in a variable and cyclical
10 manner over the plurality of sub-frames so that the increment in fixed codebook gain is temporally dispersed.

10. The method according to claim **9**, wherein a predetermined number of sub-frames define a cycle period, the method further comprising:
15 maintaining the fixed codebook gain index at a first index increment value for one or more sub-frames in a cycle period; and
 incrementing the fixed codebook gain index to a second index increment value for the remaining sub-frames in that cycle period.

20 **11.** The method according to claim **10**, wherein a first cycle period is defined by a pattern of index levels by sub-frame, the method further comprising the step of repeating the pattern in one or more subsequent cycle periods.

12. The method according to claim **10**, wherein a first cycle period is defined
25 by a pattern of index levels by sub-frame, the method further comprising the step of changing the pattern in one or more subsequent cycle periods.